

Work Order ID 138556

138556

Page 1

November 02, 2015 2:05:30 PM

Item ID: D4411-5 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Placard
 Start Date: 11/2/2015 Start Qty: 200 ***NS*** Cust Item ID:
 Required Date: 11/23/2015 Req'd Qty: 200 ***NS*** Customer:
 Reference:

Approvals: Process Plan: SN Date: 20151102 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4411	<u>FB3</u> <u>BCL</u>								
100	PURCHASING	0.00							
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>30351</u>								
	Manufacture as per dwg								
	Possible Supplier: Studio letterage								
	Material release note is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.00							
Packaging	Ensure material release note is attached								
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control									

CX NOV 03 2015 6

6x SP15-11-9

6 DAS
38
9-02

NOV 10 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

Work Order ID 138556***138556***

Page 2

November 02, 2015 2:05:30 PM

Item ID: D4411-5

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Placard

Stop ***NS2***

Start Date: 11/2/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 11/23/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>St096</u>	0.00							
130						<u>6</u>	<u>MLJ</u>	<u>15-11-10</u>	
Packaging	Memo	0.00							
Packaging	***ONE YEAR EXPIRED DATE FROM RECEIVING: <u>15-11-10</u> ***								
140	QC21- Final Inspection - Work Order Release	0.00							
140						<u>MLJ</u>	<u>15-11-10</u>		
QC	Memo	0.00							
Quality Control									

SA 20151110

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																				
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																				
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																				
Large Fab ☐	Composite ☐	Supplier ☐																																																																					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																																
Description Work Order Deviation				Disposition				Completed By																																																															
								Lead hand / Supervisor Approval Verification																																																															
										QC / QA Coordinator Approval																																																													
Root Cause <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Environment ☐</td> <td style="width: 15%;">No Re-verification ☐</td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> </tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Pressure/Forced ☐</td> <td style="width: 15%;">Temperature/Cure ☐</td> <td style="width: 15%;">Power Loss/Surge ☐</td> <td style="width: 15%;">Positioned Wrong ☐</td> </tr> <tr> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Environment ☐	No Re-verification ☐																																																																						
Design ☐	Operator ☐																																																																						
Doc/Data ☐	Offset/Setup ☐																																																																						
Equip/Tooling ☐	Supplier ☐																																																																						
Handling/Pre ☐	Training ☐																																																																						
Material ☐	Use for Testing ☐																																																																						
Internal Transport ☐	Poor Information ☐																																																																						
Tribal Knowledge ☐	Rushing ☐																																																																						
LOA ☐	Product Improvement ☐																																																																						
Substation ☐	Process Improvement ☐																																																																						
Past Expiry Date ☐	Manufacturing Process ☐																																																																						
Misidentified ☐	Past Due ☐																																																																						
Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																				
Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																				
Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																				
Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																				
Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																				
Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																				
Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																				
Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																				
Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																				
Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																				
		OTHER :																																																																					

Picklist Print

November 02, 2015 2:05:41 PM

Page 1

Work Order ID: 138556

138556

Parent Item: D4411-5

D4411-5

Parent Item Name: Placard

Start Date: 11/2/2015

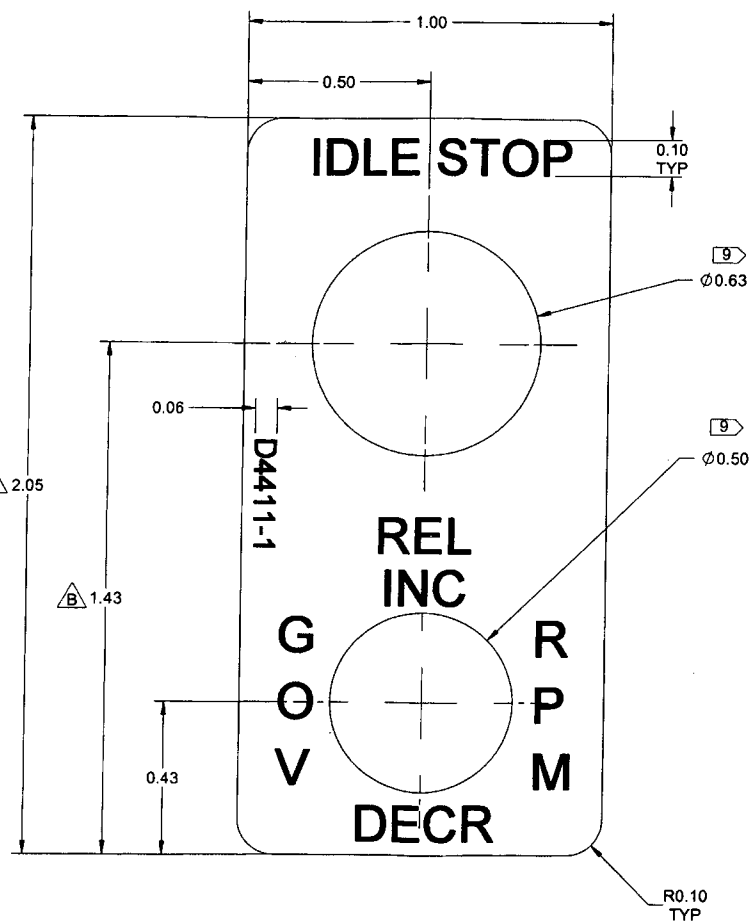
Required Date: 11/23/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 11-11-02 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4411-5P *D4411-5P* Placard		Purchased		No			Each	0.0000		2			
										**	6x8p15-11-9.		



D4411-1 PLACARD

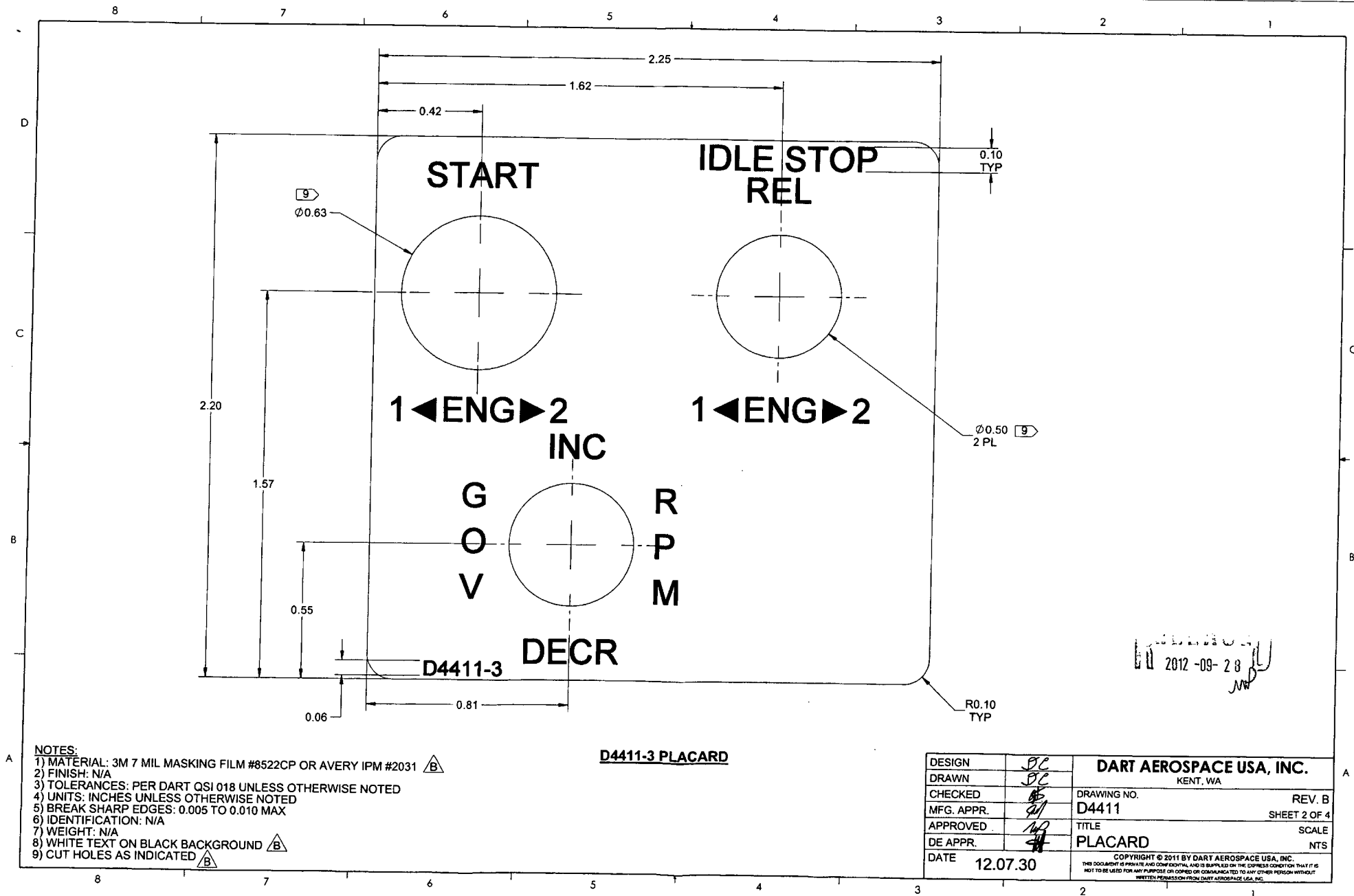
NOTES:

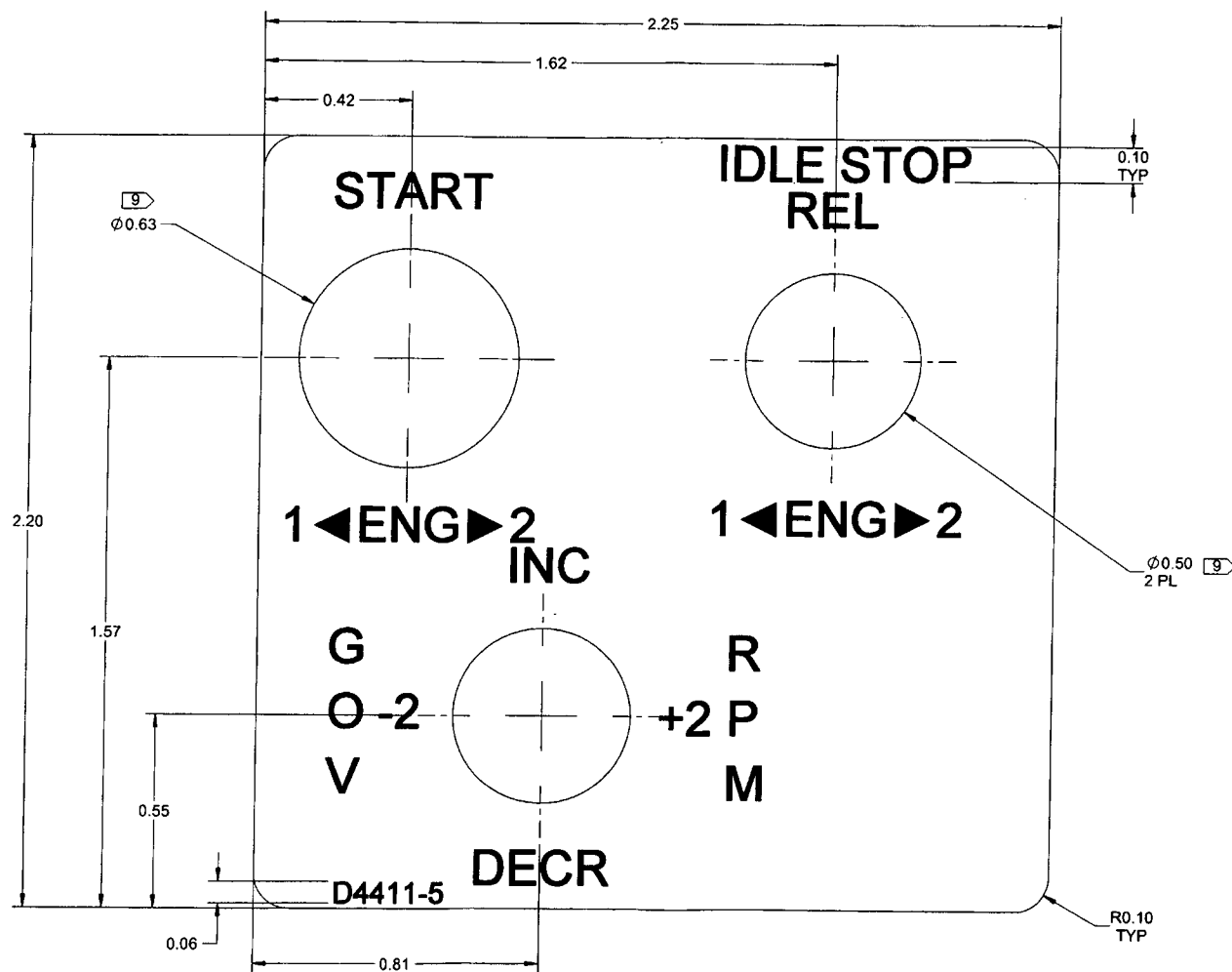
- 1) MATERIAL: 3M 7 MIL MASKING FILM #8522CP OR AVERY IPM #2031
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) WHITE TEXT ON BLACK BACKGROUND
- 9) CUT HOLES AS INDICATED

2012-09-28

20151102 SH 138556

B	CHANGE MATERIAL TYPE & BACKGROUND COLOR. ADD NOTE RE CUTTING HOLES. SHORTEN -1 SLIGHTLY. ZN C6-1.	DC	12.07.30
A	NEW ISSUE	DC	11.06.20
REV.	DESCRIPTION	BY	DATE
DESIGN	DC		
DRAWN	DC		
CHECKED	DC		
MFG. APPR.	DC		
APPROVED	DC		
DE APPR.	DC		
DATE	12.07.30		
DART AEROSPACE USA, INC. KENT, WA DRAWING NO. D4411 TITLE PLACARD REV. B SHEET 1 OF 4 SCALE NTS COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			





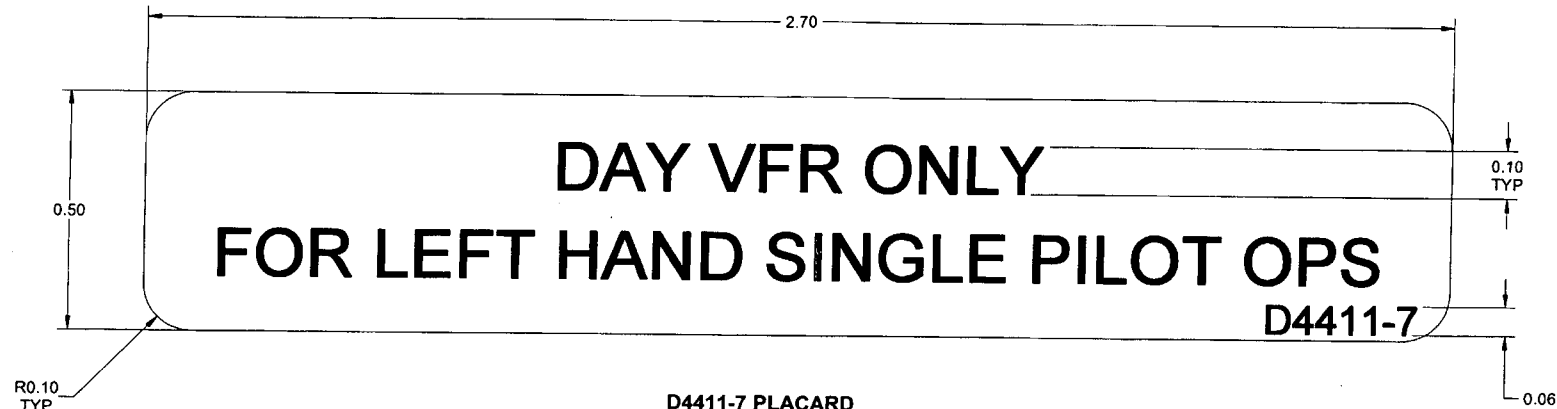
RELEASED
2012-08-28
JMP

NOTES:

- 1) MATERIAL: 3M 7 MIL MASKING FILM #8522CP OR AVERY IPM #2031 $\triangle B$
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) WHITE TEXT ON BLACK BACKGROUND $\triangle B$
- 9) CUT HOLES AS INDICATED $\triangle B$

D4411-5 PLACARD

DESIGN	DC	DART AEROSPACE USA, INC.	
DRAWN	DC	KENT, WA	
CHECKED	AS	DRAWING NO.	REV. B
MFG. APPR.	21	D4411	SHEET 3 OF 4
APPROVED	140	TITLE	SCALE
DE APPR.	44	PLACARD	NTS
DATE	12.07.30	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC.	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			



RELEASED
2012-09-28
MP

NOTES:

- 1) MATERIAL: 3M 7 MIL MASKING FILM #8522CP OR AVERY IPM #2031 $\triangle$ B
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) WHITE TEXT ON BLACK BACKGROUND $\triangle$ B

DESIGN	DC	DART AEROSPACE USA, INC.	
DRAWN	DC	KENT, WA	
CHECKED	DE	DRAWING NO.	REV. B
MFG. APPR.	DE	D4411	SHEET 4 OF 4
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	PLACARD	NTS
DATE	12.07.30	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO30351**

Purchase Order Date 11/3/2015

PO Print Date 11/3/2015

Page Number 1 of 2

Order From :

VC-STU001

Ship To : DART AEROSPACE LTD

STUDIO DE LETTRAGE 2001
210 MAIN WEST
HAWKESBURY, ON K6A 2H6
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAKED

Contact Name

Vendor Phone 613 632 5449

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4411-3P ✓ AS PER DWG D4411 REV. B B138555	Placard	11/10/2015 Yes 11/10/2015		6.00 ✓ Each	\$13.33	\$80.00
Line Total:							\$80.00
2	D4411-5P ✓ AS PER DWG D4411 REV. B B138556	Placard	11/10/2015 Yes 11/10/2015		6.00 ✓ Each	\$13.33	\$80.00
Line Total:							\$80.00
3	D4411-7P AS PER DWG D4411 REV. B B138557	Placard	11/10/2015 Yes 11/10/2015		6.00 Each	\$13.33	\$80.00

Note:

11/3/2015

STUDIO

210 Main Street West
Hawkesbury, ON K6A 2H6
Phone # 613-632-2001

Invoice

Date	Invoice #
11/6/2015	41285

Invoice To

Dart Aerospace Ltd
1270 Aberdeen
Hawkesbury
Ontario
K6A 1K7

Ship To

P.O. No.	Terms	Rep	Ship	Via	F.O.B.	Project
30351			11/6/2015			WO16399

Quantity	Item	Description	Price Each	Amount
6	4005	D4411-3P	13.33333	80.00
6	4005	D4411-5P.	13.33333	80.00
6	4005	D4411-7P ***** Back Ordered until Monday, November 09th, 2015***** Attn: Chantal	0.00	0.00

Subtotal \$160.00

Thank you for your business.

Sales Tax \$20.80

Total \$180.80

******CERTIFICATE of CONFORMITY******

Customer:

Studio de Lettrage 2001

Purchase Order N°:

30351

Packing Slip N°:

16399

Part N°:

Serial N°:

Description:

D4411-3P, D4411-5P,

Quantity:

6,6

Certification:

We hereby certify that:

SP15-11-9

1. The above listed items were manufactured, repaired and/or inspected in accordance with applicable drawings and/or specifications;
2. All work was accomplished in accordance with the Dart Aerospace Purchase Order;
3. Results of all inspections, chemical or physical tests, as well as other evidence, which shows the acceptability of raw materials, parts and/or assembly components are on file and available for inspection at any time.

Authority:

Avery

APPROVAL: Valerie Young

DATE:

Signature:

Val. 7

Nov 06, 15

Title: office administrator

PRODUCT DATA SHEET



Avery® IPM™ 2031

issued: 01/04/2005

Introduction

Avery® IPM™ 2031 is a high quality pressure-sensitive vinyl film, designed for use on wide format inkjet printers. Avery® IPM™ 2031 has excellent printing properties, allowing crisp print quality with bright and vibrant colours. Avery® IPM™ 2031 offers rapid ink drying and a water-resistant material. It combines good adhesion during its life and easy removal afterwards.

Description

Facefilm: 80-micron premium white calendered, topcoated vinyl.
Adhesive: removable, acrylic based
Backing paper: one side coated kraft paper, 140 g/m²

Features

- Excellent printability
- Vibrant and bright colours
- Crisp print quality
- Spray water resistant wit specific pigmented inks
- Good adhesion, excellent removability
- Warranty on outdoor durability

Recommendations for use

A wide variety of full-colour graphics for indoor - and **short/medium term outdoor** applications such as posters, murals, displays, exhibition stands, vehicle graphics etc. Avery® IPM™ 2031 is suitable for application to a wide variety of substrates and will remove cleanly for up to 1 year after application.

IPM media should be handled with care as any surface contamination may affect the print quality. Media should be processed in an environment of 15-25°C and 30-70% relative humidity. After drying, the finished prints should be wrapped in polyethylene film and despatched flat or rolled with the printed side facing outwards. To protect prints against water, UV/light and abrasion, overlamination with a clear film is recommended. For specific details of Avery® DOL combinations, refer to "Technical Bulletin 5.3. Recommended combinations of Avery® Overlaminates and Avery® Digital Print Media"

Always test your combination of Avery® IPM™ medium, inkjet printer and inks prior to commercial use.

Compatibility

Avery® IPM™ 2031 is compatible with a broad selection of inkjet printers, when printing with pigmented, water based inks. For specific details refer to "Technical Bulletin 5.6 Avery Dennison Inkjet Print Media - Printer compatibility".

Durability:

Avery® IPM™ 2031 is warranted for outdoor use in conjunction with pigmented outdoor inks from HP, Encad and Colorspan. The warranted period varies from type of application and type of overlaminate from 18 months up to 5 years. For full details, see our Avery® IPM™ Outdoor warranty.



www.averygraphics.com

Graphics Division
Rijndijk 86, P.O. Box 118
2394 ZG Hazerswoude - The Netherlands
Tel +31 71 3421500 - Fax +31 71 3421538

PRODUCT CHARACTERISTICS

Avery® IPM™ 2031

Physical properties

Features	Test method ¹	Results
Caliper, facefilm	ISO 534	80 µm
Gloss	ISO 2813, 20°	1%
Dimensional stability	DIN 30646	0.3 mm. max
Adhesion, initial	FINAT FTM-1, stainless steel	180 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	260 N/m
Flammability		Self extinguishing
Accelerating ageing	DIN 53587, 500h exposure	No negative impact on film Performance
Shelf life	Stored at 22° C/50-55 % RH	2 years
Removability		up to 1 year
Not when applied to: Nitro-cellulose paints, ABS, Polystyrene, certain types of PVC		
Durability ²	Overlaminated with DOL 4300	5 years
	Overlaminated with DOL 1000, DOL 1100 with overlaps	3 years
	Overlaminated without overlaps for static applications only	2 years
	Without overlaminate and used for static, Non-abrasive application ONLY	18 months

Only when printed with ENCAD GO, HP and Colorspan pigmented inks and when properly applied in accordance with our application instructions. Only applicable for vertical exposure.

Temperature range

Features	Results
Application temperature	Minimum: +10°C
Service temperature	-20°C to +80°C

Important

Information on physical and chemical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.

All technical data are subject to change. In case of any ambiguities or differences between the English and foreign versions of these Conditions, the English version shall be controlling.

Warranty

Avery® branded materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give any guarantee, warranty, or make any representation contrary to the foregoing.

All Avery® branded materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

1) Test methods

More information about our test methods can be found on our website.

2) Durability

The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased.



www.averygraphics.com

Graphics Division
Rijndijk 86, P.O. Box 118
2394 ZG Hazerswoude - The Netherlands
Tel +31 71 3421500 - Fax +31 71 3421538



Procurement Quality Clauses

A000 QUALITY CLAUSES NOT REQUIRED

Non-shippable items, for Dart Aerospace internal use only.

A001 STATISTICAL PROCESS CONTROL

The supplier must apply Statistical Process Control (SPC) to this purchase order. A (Cpk) of 1.33 or greater is required. Each shipment must be accompanied with a signed copy of the applicable SPC Control Plan(s). The Control Characteristic listed in SPC Control Plan shall be approved by DART AEROSPACE Quality Assurance prior to commencing with production / processing.

A002 FABRICATION INSPECTION SYSTEM (FIS) FAR21.303

The supplier's shall maintain a FIS in compliance with the requirements of FAR 21.303 (h). The FIS shall be approved and subject to audit by FAA, or its representative at any time.

A003 QUALITY SYSTEM SURVEILLANCE

As a DART AEROSPACE supplier manufacturing a product requiring DART AEROSPACE Customer and/or regulatory approval, the Seller's "Quality Control System" shall be subject to surveillance by DART AEROSPACE and the FAA.

A004 FAA-PMA /TSO

As a DART AEROSPACE supplier manufacturing an article or component for which DART AEROSPACE holds Supplemental Type Certificates (STC), your inspection system shall be subject to inspection by DART AEROSPACE at a level commensurate with criticalness of the article or component.

A005 RIGHT OF ENTRY

Allows DART AEROSPACE, its customers and regulatory agencies the right of access, through prior notification, to determine and verify the quality of work, applicable quality records and materials at all applicable area of all facilities, at any level of the supply chain, involved in the order.

A006 REQUIREMENTS FOR AIRWORTHINESS CERTIFICATION

Conformity Certification is required for articles specified on this purchase document. Include with each shipment, a true copy of Form One, Authorized Release Certificate, for Airworthiness. Foreign government equivalent to FAA Form 8130-3 is acceptable for imported articles.

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

FAI shall be performed on all new or revised production manufactured items by seller at seller's facility. Results shall be documented on a report identified as "First Article Inspection Report" (FAIR). The report will be maintained at the seller's facility, and be available for review by Dart Aerospace when requested.

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)

FAI's shall be performed on all new or revised production manufactured items by seller at seller's facility. Results will be documented on a report identified as a "First Article Inspection Report" (FAIR). The identified first article unit and the FAIR will be sent to Dart Aerospace.



Procurement Quality Clauses

A009 FIRST ARTICLE INSPECTION (FAI) BY DART AEROSPACE AT SELLER'S FACILITY

FAI and/or test shall be accomplished at the Seller's facility before the balance of order may be shipped. DART AEROSPACE will conduct or witness inspections and/or tests and the results will be on a report form identified as "First Article Inspection Report".

A010 DART AEROSPACE SOURCE INSPECTIONS

Dart Aerospace inspection is required prior to shipment from your facility. Evidence of such inspection must be included in your packing documents accompanying each shipment. You must contact Dart Aerospace's buyer and establish verification arrangements and the method of product release. Drawings, inspection/test documents, and specifications, as applicable, covering material on this order shall be available for inspection at your facility.

A011 DELEGATIONS -SUPPLIER VERIFICATION OF DART AEROSPACE PRODUCT

The supplier has met the requirements established by DART AEROSPACE quality organization for the verification of DART product.

A012 CHEMICAL AND PHYSICAL TEST REPORTS

Each shipment must be accompanied by one (1) legible and reproducible copy of all chemical and physical test reports identifiable with materials ordered. The reports must contain the signature and title of the authorized representative of the agency performing the test and must assure conformance to specification requirements.

A013 SHELF LIFE CONTROLLED MATERIAL; 80% SHELF LIFE REQUIRED AT RECEIPT

Time sensitive material shall be furnished with a minimum of 80% of its shelf life remaining at date of shipment. Shelf life duration, date of manufacture and date of expiration shall be listed on material certification.

A014 SHELF LIFE CONTROLLED MATERIAL; 70% SHELF LIFE REQUIRED AT RECEIPT

Time sensitive material shall be furnished with a minimum of 70% of its shelf life remaining at date of shipment. Shelf life duration, date of manufacture and date of expiration shall be listed on material certification.

A015 SHELF LIFE CONTROLLED MATERIAL; 60% SHELF LIFE REQUIRED AT RECEIPT

Time sensitive material shall be furnished with a minimum of 60% of its shelf life remaining at date of shipment. Shelf life duration, date of manufacture and date of expiration shall be listed on material certification.

A016 PERSONNEL QUALIFICATION

Supplier shall ensure all employees performing quality sensitive tasks on Dart products are qualified to perform the task associated with the product and this information is available in their training records.



Procurement Quality Clauses

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A. Sheet or Plate Stock -Metallic or Non-Metallic

Each sheet or plate shipped shall be identified by continuous stenciling, of sufficient size to be readily legible, applied by permanent ink or dye of contrasting color, non-injurious to metal surfaces and not soluble.

B. Rod, Bar or Tube -all shapes -1/2 inch cross section or larger

Each length of Rod, Bar or Tube shipped shall be identified at one end or by continuous stenciling, of sufficient size to be readily legible, applied by permanent ink or dye of contrasting color, non-injurious to metal surfaces and not soluble in cutting and coolant oils. If continuous, spacing between groups of stencil letters shall not exceed twelve (12) inches. Information shall include material type or designation, material specification and temper.

C. Rod, Bar or Tube -all shapes -Smaller than 1/2 inch cross section

Rod, bar or tube shipped shall be bundled together; each bundle containing materials from the same (manufacturing/heat treatment) batch, and shall be identified as follows: An adhesive label or identification tag shall be securely attached to each bundle. This label or tag shall be permanently marked to indicate material type or designation, material specification and temper.

D. Castings / Forging -Ferrous or Non-Ferrous

Material shipped shall be identified with the part number, "melt" number, heat treat lot (if applicable) and serial number (if applicable). Identification of parts shall be in accordance with applicable drawings/specifications. Where drawings or specifications do not define method of identification, such identification shall be effected in accordance with MIL-STD-130.

E. Extrusions

Each length of extrusion shall be identified at one end or by continuous stenciling, of sufficient size to be readily legible, applied by permanent ink or dye of contrasting color, non-injurious to metal surfaces and not soluble in cutting and coolant oils. If continuous, spacing between groups of stencil letters shall not exceed twelve inches. Information shall include material type or designation, material specification, temper and heat lot number.

A018 ELECTRICAL EQUIPMENT

Each shipment shall be accompanied by one (1) legible and reproducible copy of a certificate containing the signature and title of the person authorizing the release of product. The certificate shall contain the part number, specification to which they conform, and general characteristic. When the parts are serialized, serial numbers shall be included on the certification. Manufacturer will maintain test reports, specification conformation and general characteristics on-site and available upon request.

A019 ELECTRICAL CABLES (WIRES)

Electrical cables shall be identified with the part number and manufacturing code. The spool, and Certificate of Conformance shall be identified per applicable standard/specification with the following information: standard / specification, size code, manufacturing year, country code (if applicable), and manufacturer.



Procurement Quality Clauses

A020 NON-DESTRUCTIVE TEST/INSPECTION IDENTIFICATION

All parts found to be acceptable by non-destructive testing methods are to be so identified by placing the proper acceptance test /inspection stamp on such acceptable parts. All parts found to be unacceptable are to be so identified by placing the proper withholding stamp on such defective parts. In those cases where NDT testing is being performed by a lower-tier supplier and his acceptance stamp is obliterated by further processing a copy of the lower-tier's certification must accompany shipment to DART AEROSPACE.

A021 DART AEROSPACE PROCESSING

Seller shall assure that any process and or non-destructive test (NDT) requested on this purchase order shall be performed only by sources currently appearing on the DART AEROSPACE's "List of Approved Vendors" for the specific type of work to be conducted.

A022 APICAL PROCESSING

Seller shall assure that any process work to be performed on Apical design and/or Part numbers by the Seller or its suppliers shall be performed only by sources noted in the latest published Apical Document Number MPP-120. MPP-120 Sources were used shall be submitted with AS9102 First Article Inspection Report and as requested by Dart Aerospace.

A023 IDENTIFICATION OF "DANGEROUS GOODS"

A "Dangerous Goods" decal must be applied to the outer container of the item being shipped and to the associated shipping document (shipper). Also, one copy of the applicable MSDS sheet must be provided with each shipment.

This is in addition to federal & provincial requirements noted in IATA & DOT CFR. It does not relieve the supplier of their responsibility to comply with any marking & labeling requirements set forth in the IATA & DOT CFR or any other legal documentation that may apply to this shipment.

A024 PROCESS CERTIFICATIONS

Each shipment shall be accompanied by one (1) legible and reproducible copy of a certificate that must include the signature and title of the person authorizing release of product certifying all processes used, such as heat treating, welding, NDT, surface preparation and treatment, etc. The certificate shall include the processing used, the specification to which they conform and the name of the agency that performed them if other than the seller (i.e. sub-vendor). When the parts are serialized, serial numbers shall be included on the certification.

A025 CERTIFICATE OF CONFORMANCE

Each shipment shall be accompanied by one (1) legible and reproducible copy of a Certification Document (Certificate of Conformance, Shipper, Packing List, etc.) that includes the identification (signature, electronic signature, stamp, etc.) of the person authorizing release of product assuring the items ordered were produced in accordance with and conforming in all respects with all applicable requirements set forth in Buyer's Standard Purchase Order Terms and Conditions and/or its contract



Procurement Quality Clauses

with Seller, including specifications, drawings, revision, marking requirements, physical item identification and electrical characteristics when applicable. When the parts are serialized, serial numbers shall be included on the certification.



Procurement Quality Clauses

A026 CERTIFICATION OF MATERIAL CONFORMANCE

Each shipment shall be accompanied by one (1) legible and reproducible copy of a Certification Document (Certificate of Conformance, Shipper, Packing List, etc.) that includes the identification (signature, electronic signature, stamp, etc. of the person authorizing release of product certifying each material used to fabricate the items ordered in this "Purchase Order".

A027 FLAMMABILITY TEST

Test reports showing actual results of flammability test which meet the requirements of FAR 25.853(a) and signed by a responsible party shall accompany this shipment.

A028 FLAMMABILITY TEST

Flammability Test reports showing actual results of flammability test(s). Reports must show Fire Worthiness resistance shall be such that the requirements of FAR 25.853 (a), Amendment 25-116 (60-Second Vertical Bunsen Burner Test). Appendix F, Part I will be met, or the latest revision of the Aircraft Materials Fire Test Handbook (DOT/FAA/AR-00/12).

A029 FLAMMABILITY TEST

Flammability Test reports verifying Smoke emission shall be such that the requirements of FAR 25.853 (d) Amendment 25-116. Appendix F, Part V will be met, or the latest revision of the Aircraft Materials Fire Test Handbook (DOT/FAA/AR00/12). Reports must include a brief description of the sample and mounting.

A030 FLAMMABILITY TEST

Flammability Test reports verifying Heat release capability shall be such that the requirements of FAR 25.853 (d), Amendment 25-116. Appendix F, Part IV will be met, or the latest revision of the Aircraft Materials Fire Test Handbook (DOT/FAA/AR-00/12). Reports must include a brief description of the sample and mounting.

A031 FLAMMABILITY TEST

Flammability Test reports showing actual test results of flammability tests which meet the requirements of FAR 25.856 (a) and AC25.856-1 or the latest revision of the Aircraft Materials Fire Test Handbook (DOT/FAA/AR-00/12).

A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT

Supplier (Distributor) Certification: A Certification shall accompany each shipment of fasteners/washers, containing the following, as a minimum:

The manufacturer lot number(s) with associates part number(s); Manufacturers name; DART AEROSPACE P.O. number; and a statement to the effect that the manufactures certification (required by the Section 7 of the "Law") is on file with the distributor.

Supplier (Manufacturer) Certification: A Certification in accordance with Section 7 of the "Law" shall accompany each shipment.

Packaging: Each lot shall be packaged in a manner that ensures there will be no co-mingling of like fasteners from different lots in the same container.



Procurement Quality Clauses

Identification: Each package shall be identified with the lot number, name of the parts, part identification number, P.O. number and name of fastener manufacturer.



Procurement Quality Clauses

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

1. When supplier is the fastener manufacturer -Each shipment shall be accompanied by one (1) legible and reproducible copy of a certificate of conformance containing the signature and title of an authorized representative which stated that the fastener have been manufactured in accordance with requirements of the applicable NAS, AN, MS government approved Parts Standard and Procurement Specification; and the chemical / physical test reports required by the government approved Procurement Specification are on file with the manufacturer, and available for review by customer and /or government quality assurance representative upon request.

2. When the supplier is a distributor -Each shipment shall be accompanied by one (1) legible and reproducible copy of conformity to purchase order requirements. The statement of conformity as a minimum shall contain DART AEROSPACE P.O. number, packing slip number; a copy of applicable test records (chemical, physical, processes and NDT) required by the government approved Parts Standard and Procurement Specification are available, or are obtainable upon customer request. The statement of conformity must contain the name of the fastener manufacturer, and shall be signed and dated by an authorized representative.

A034 INTER COMPANY SHIPPERS

When products are shipped from one Dart Aerospace facility to another, the certification log number of the product being shipped must be recorded on the shipping document.

A035 OUT TIME REQUIREMENTS

Supplier must record the "out-time" of exposure sensitive material (pre-preg) on packing list.

A036 PRIORITY DX-A1

Priority DX-A1; This is a rated order certified for national defense use. You are required to follow all the provisions of Defense Priorities and Allocations System regulation (15 CFR 350).

A037 PRIORITY DO-A1

Priority DO-A1; This is a rated order certified for national defense use. You are required to follow all the provisions of the Defense Priorities and Allocations system regulation (15 CFR 350).

A038 AS9102 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A FAI per AS9102 shall be performed on all new or revised manufactured items by the seller or at the seller's facility. Forms other than as identified in the Appendix of AS9102 must contain all required and conditionally required information and use same field reference numbers. Report is to be maintained at seller's facility and available for review at Dart Aerospace's request.

A039 AS9102 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)

A FAI per AS9102 shall be performed on all new or revised manufactured items by the seller or at the seller's facility. Forms used other than as identified in the Appendix of AS9102 must contain all required



Procurement Quality Clauses

and conditionally required information and use same field reference numbers. The report will be sent to Dart Aerospace.



Procurement Quality Clauses

A040 NOTIFICATION OF QUALITY ESCAPE

Seller will report to Buyer if a product, article or part has been released from Seller or Seller's subcontractors or suppliers and subsequently found not to conform to the applicable design data.

A041 QUALITY MANAGEMENT SYSTEM

Supplier shall implement, document and maintain a Quality Management System in accordance with applicable requirements of AS9100 series standards or ISO9001 standard and additional requirements specified on Buyers contract or purchase order.

The Quality Management system shall be appropriate to the products the Supplier designs, manufactures, repairs or sells and shall cover all activities concerned by Dart Aerospace contracts or purchase orders.

A042 DART NOTIFICATION BY SUPPLIER

Supplier shall notify Dart of changes in product and / or process, change of supplier and changes of manufacturing facility locations.